EXECUTIVE OFFICER'S SUMMARY REPORT 9:00 a.m., May 15, 2003 North Coast Regional Water Board Hearing Room 5550 Skylane Blvd, Suite A Santa Rosa, California

ITEM: 15

SUBJECT: Public Hearing to Consider Issuance of Cease and Desist Order No. R1-2003-0049

To the City of Ferndale, Wastewater Treatment Facility.

DISCUSSION

Waste Discharge Requirements (WDRs) Order No. R1-2000-92, adopted by the Regional Water Board on November 29, 2000, governs the municipal wastewater treatment facility (WWTF) for the City of Ferndale (Permittee). The Order also serves as a National Pollutant Discharge Elimination System (NPDES) permit. The proposed Cease and Desist order will establish a time schedule for compliance with WDRs.

The WWTF provides secondary treatment and consists of a gravity collection system, seven-acre aerated oxidation pond, settling basin, chlorine contact basin, and dechlorination system. Average dry weather design flow is 1.0 million gallons per day (mgd); however, at the present time, average dry weather flow is approximately 0.32 mgd. Peak wet weather flows reach approximately 3.7 mgd.

Secondary-treated effluent is discharged into Francis Creek near its confluence with the Salt River during the winter discharge period of October 1 to May 14. The Salt River becomes estuarine and discharges into the Eel River estuary. The volume of effluent consistently exceeds one percent of the receiving water flow at the point of discharge into Francis Creek at its confluence with the Salt River. Discharge prohibition A(6) of Order No. R1-2000-92 prohibits effluent discharges in excess of one percent of the receiving water flow (100:1 dilution). During the summer period of May 15 to September 30, treated and disinfected effluent is used for pasture irrigation on private property near the WWTF.

The terms in Order No. R1-2000-92 that are being violated or threaten to be violated as a result of the Permittee's inability to comply with the discharge rate restriction are:

A. DISCHARGE PROHIBITIONS

- 2. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code (CWC), is prohibited. [Health and Safety Code, Section 5411]
- 6. During the period of October 1 though May 14, discharges of wastewater shall not exceed one percent of the combined flows of Francis Creek and the Salt River. For purposes of this Permit, the combined flow shall be that flow of Francis Creek and Salt River measured at the confluence.

The Permittee recognizes that the current effluent discharge constitutes a violation of WDRs and has explored alternatives to comply with the discharge rate limitation. A 1999 study produced thirteen alternatives to the current discharge. Not all of the alternatives would result in compliance with WDRs. The "preferred alternative" was improving wastewater effluent by adding a constructed wetland to the existing system. However, in recent years this alternative has

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been reclassified as infeasible due to financial and physical constraints. Furthermore, it would not provide compliance with WDRs.

Another conclusion developed in the 1999 study was that the Permittee should concentrate on improving the effluent quality and efficiency of the WWTF. Improvements that have occurred in the last few years include adding an automated chlorination system, lining the chlorine contact chamber (chamber) with concrete, extending the baffles in the chamber, and providing easier access for cleaning the chamber. These improvements have greatly reduced the number of coliform violations and eliminated the possibility of backflows from Francis Creek entering the chamber.

The Permittee addressed exceptions to the waste discharge rate limitations, described in the Water Quality Control Plan for the North Coast Region (Basin Plan), that would be necessary for the Regional Water Board to grant an exception to the 100:1 dilution requirement. The Permittee reviewed WWTF reliability, beneficial uses of the receiving waters, water reclamation and conservation, and effluent and receiving water monitoring data. On November 13, 2002, the Permittee submitted a report to the Regional Water Board expressing its desire to pursue an exception to the Basin Plan's requirement that treated wastewater effluent discharges to Francis Creek at the Salt River not exceed one percent of the receiving waters' flow. The Permittee estimates that the lowest dilution ratio that would be achieved is 3:1.

The Permittee continued to explore alternatives from the 1999 study to see if any of these options are still plausible. Specifically, the Permittee is considering constructing a 1.5-mile discharge pipeline along Fulmor Road to the Eel River. Eel River flow at this point would meet the Basin Plan effluent dilution requirement by providing at least a 300:1 dilution throughout the discharge period. The Permittee is monitoring the potential discharge point to determine the limits of the Eel River estuary. The discharge would not be permitted during periods of salt-water intrusion at the proposed discharge point.

The Permittee now has two alternatives – seek an exception to the Basin Plan dilution requirement of 100:1 or build a new discharge pipeline along Fulmor Road to the Eel River.

The tentative Cease and Desist order contains a time schedule for the Permittee to select a method for long-term compliance, complete the California Environmental Quality Act process in a timely manner, and proceed toward compliance with Waste Discharge Requirements. Full compliance with Waste Discharge Requirements must be achieved by February 5, 2005. Until full compliance is achieved, the Permittee shall operate and maintain, as efficiently as possible, all facilities and systems necessary to comply with discharge prohibitions A (2) and A (6) to the maximum extent practicable.

PRELIMINARY STAFF RECOMMENDATION:

Adopt the tentative Cease and Desist Order for the City of Ferndale WWTF.

KLJ:js/FerndaleEOSR